To test this tic tac toe game, we will perform the following tests.

1. Broad Smoke Test: We will attempt to play a standard game of tic tac toe to determine if this application functions at a base level at all.
2. Tie Game Test: We will intentionally draw the game of tic tac toe until the board is completely full. We will want to determine if the game successfully recognizes this as a tie.
3. Same Square Test: We want to test if the game allows the user to play on a square that has already been played on. We will test this by attempting to play on both an X and an O square.
4. Outside The Box Test: We will do a simple test to determine what happens if we click outside the box.
5. Each Square Tests: Finally we will run several repeated tests ensuring the game can recognize and respond to moves on each square.

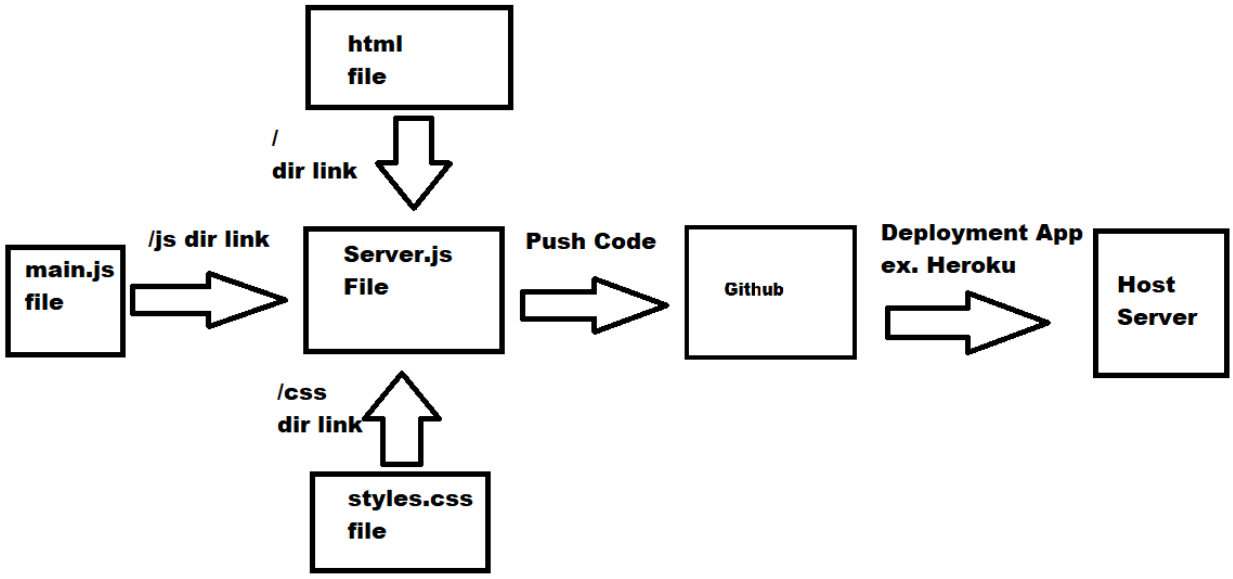
Test Results

1. When we ran this test the game played as normal. However when X won the game, the game instead interpreted this and declared X as the loser. This result will lead us to perform two additional tests. First we will reattempt this test picking a different combination of squares to check if this result happens in all X victory cases or is isolated. Secondly, we will have X lose a game to see who is declared the loser when O wins. These additional tests showed the winner as the loser each time.
2. We attempted this test several times. In each case, we were unable to reach a tie as the O player stopped playing after 3 moves. This game clearly has much bigger issues than we anticipated.
3. During the same square test, we were able to determine that player X is able to play on the same tile that O has previously played. The tile now becomes an X. We also saw that player O will consistently play on square 3, overriding player X with a lowercase O.
4. Clicking outside the boxes appears to have no effects at all. This test was passed successfully.
5. After several tests, all squares appear playable for player X. There were no issues discovered here.

Known Bugs

1. The game is unable to successfully recognize the loser. Across several test cases, it continuously declared the winner as the loser.
2. The O player only makes 3 moves, regardless of the result. This is not ideal for a tic tac toe game.
3. The game allows both players to play over each other.
4. In square 3, the O player will play a lowercase o instead of the correct capital O. This is not ideal for consistency.

Deployment Flowchart



Heroku Link:
https://week6assessmentjl.herokuapp.com/